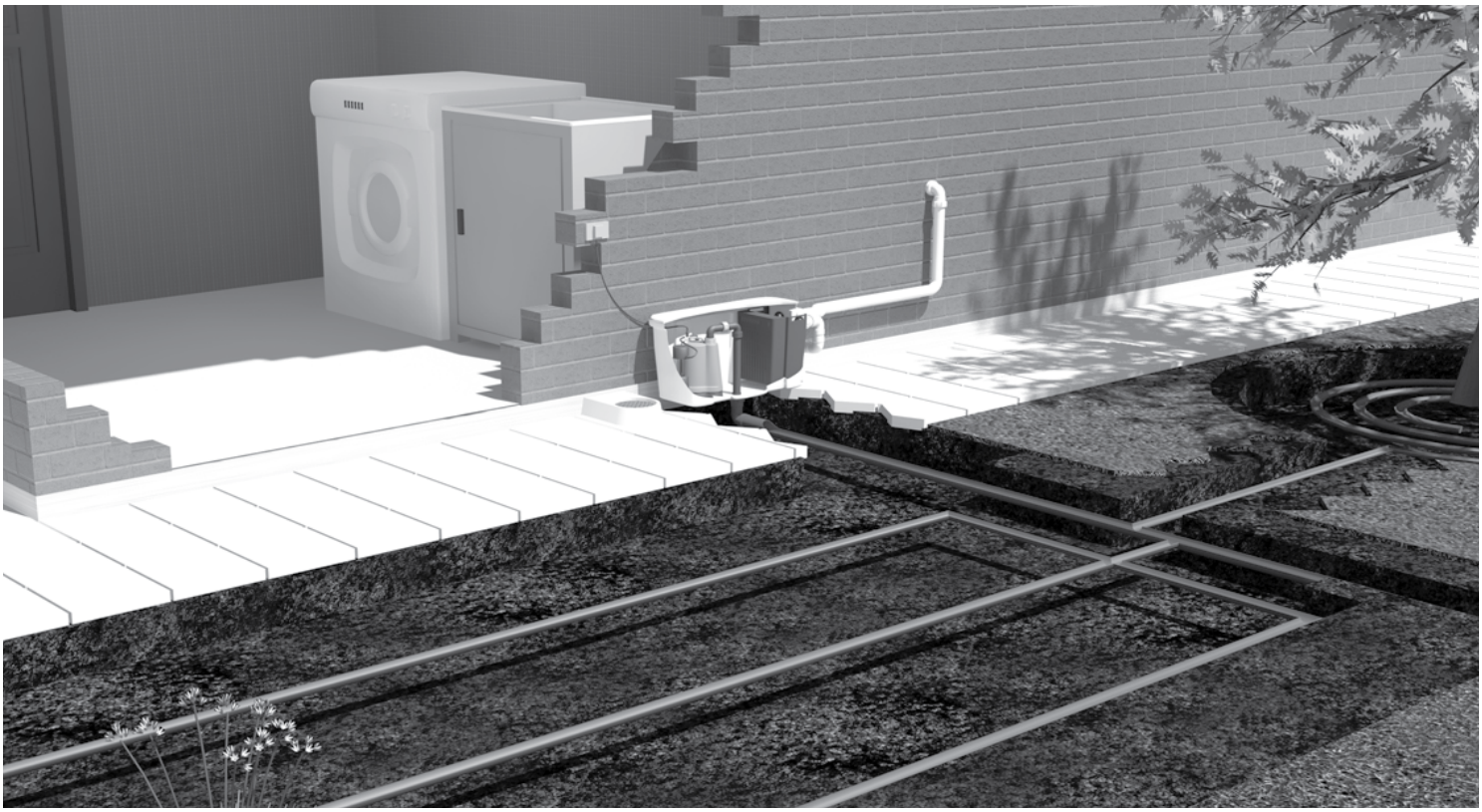
UNIVERSAL GREYFLOW

GFlow System

GreyFlow Above Ground Series

USER'S MANUAL

Introduction • Installation • Maintenance



WaterMark™

IAPMO

Grey water reuse system

☐ GFlow (UP-GF-GF)

"moving water"

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INTRODUCTION:

Congratulation! You have taken an important step towards environmentally friendly living with your purchase of the Universal **GFlow** Grey Water Diversion and Reuse System.

The **GFlow** System is designed for above ground applications where the Grey Water supply pipe is higher than the irrigated garden area.

Please Note: The **GFlow** System is NOT suitable for the Grey Water from the kitchen sinks.

The advantages of **GFlow** are as following:

1. Economical
2. Reliable
3. Low maintenance
4. Easy installation and operation

Manual diversion of the Grey Water to sewer is done through a 3-way manual valve supplied with the unit.

The **GFlow** must be used with the Grey Flow Irrigation Kit (UP-GF-DL-CK) sold separately.

The **GFlow** System has Watermark and IAPMO UPC certifications, is approved for use in all states, and is approved for government Grey Water rebates wherever available.

DEFINITION:

Grey Water is wastewater generated from domestic activities such as laundry, shower, and bathing, which can be recycled on-site for uses such as landscape irrigation and constructed wetlands. This wastewater contains no fecal matter (human feces). Grey Water differs from water from toilets which is designated sewage or blackwater to indicate it contains human waste.

- The Grey Water supply point must be higher than the garden area
- The drip-line must be installed below mulch or soil (check for Local State, Municipal and Council laws and regulations in your area)
- 110 volts power supply must be available
- The PVC/ABS plumbing connections must be installed by a licensed plumber
- Minimum required garden area applies (REF. TABLE 1.0)

TABLE 1.0

Number of bedrooms in the house	Assumed number of people in the house	Quantity of Grey Water reuse in Gallons/day	Soil Type	Minimum garden area to irrigate in Square Feet	Recommended irrigation area in Square Feet
2	3	75	Sand	90	230 & 590
			Loam	130	
			Clay	185	
3	4	100	Sand	115	320 & 790
			Loam	180	
			Clay	230	
4	5	125	Sand	160	395 & 1050
			Loam	225	
			Clay	320	
5	6	150	Sand	185	460 & 1180
			Loam	265	
			Clay	370	
6	7	175	Sand	220	540 & 1380
			Loam	320	
			Clay	440	

GFlow Complete System is supplied with:

1 GFlow lid cover

1 2" PVC/ABS inlet outlet manifold with a 3-way manual diversion valve

2 lint filters

2 wall mounting brackets

1 GFlow filter basket

1 GFlow buffer tank fitted with a float controlled submersible pump

1 Grey water warning sign

Grey Water Warning Sign
to be visible at all time

The following needs to be purchased separately:

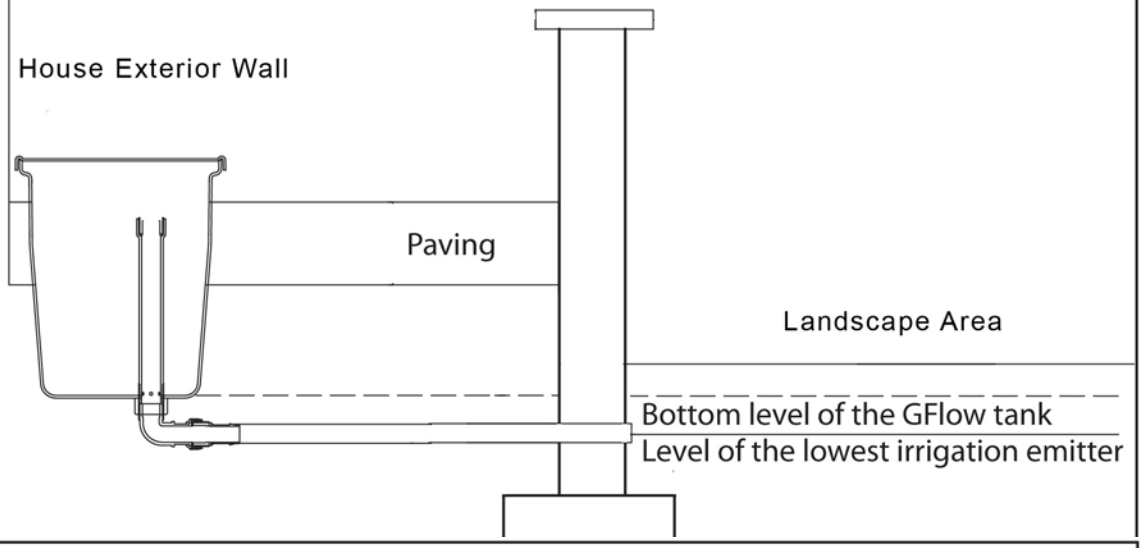
Grey Flow Irrigation Kit including:

- 1 Roll of Grey Flow purple drip-line with integration large passage turbulent 2 G/H Flow dripper (328 feet)
- 25 drip-line fittings
- 1 punch tool

IMPORTANT DO'S AND DON'TS

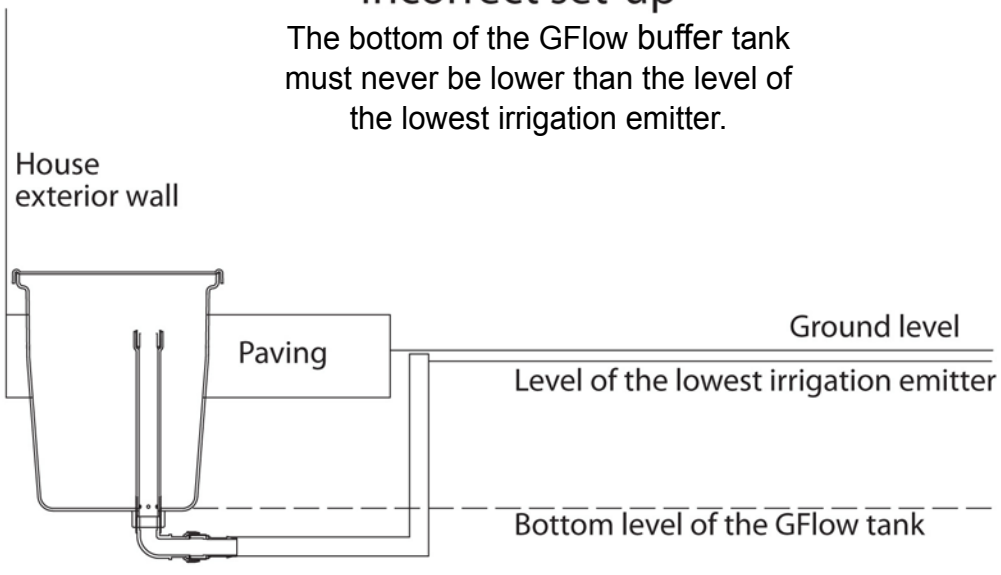
Correct set-up

The bottom of the GFlow buffer tank must always be higher than the level of the lowest irrigation emitter.



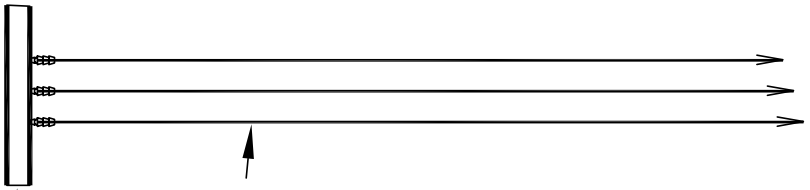
Incorrect set-up

The bottom of the GFlow buffer tank must never be lower than the level of the lowest irrigation emitter.



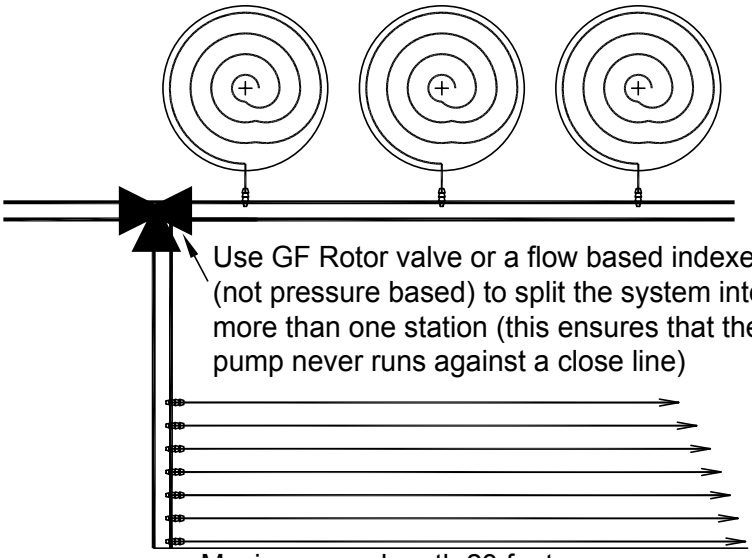
IMPORTANT DO'S AND DON'TS

To avoid Grey Water overflow to sewer use all 330 feet of Grey Flow Drip-line* (330 ft) per station



Do not run drip-line more than 23 feet from the start of the feeder pipe

Use minimum 1" feeder pipe



Use GF Rotor valve or a flow based indexer (not pressure based) to split the system into more than one station (this ensures that the pump never runs against a close line)

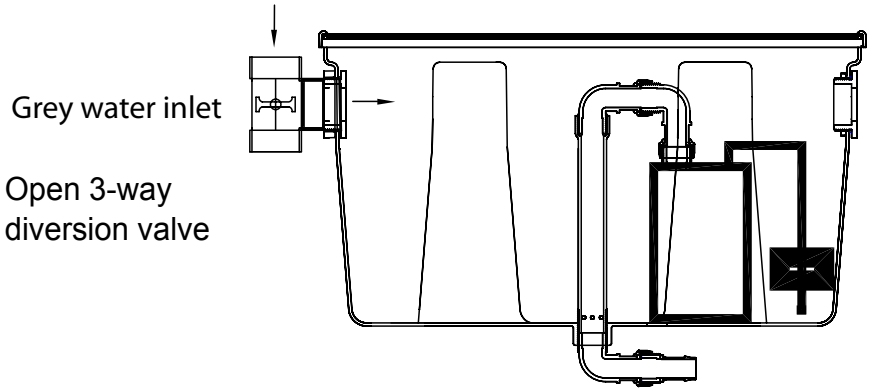
Maximum run length 23 feet

Do not connect to existing system or substitute drip-line (the supplied pump and filters have been sized to suit the full 330 feet supplied drip-line flows and dripper sizes)

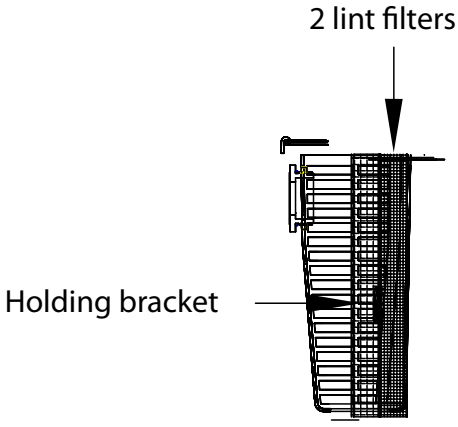
** If non Grey Flow Drip-line is used the warranty may be void.*

IMPORTANT DO'S AND DON'TS

Never operate the GFlow system without the filter basket and the lint filters

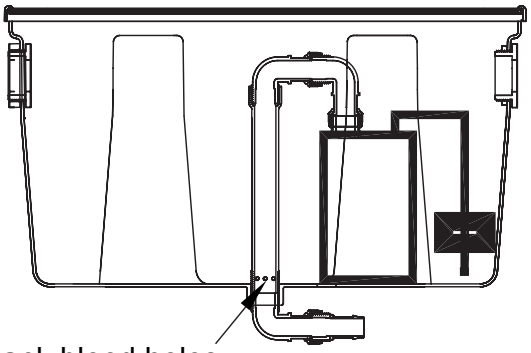


Make sure to insert the lint filters all the way down inside the filter basket and secure their position with the supplied holding bracket



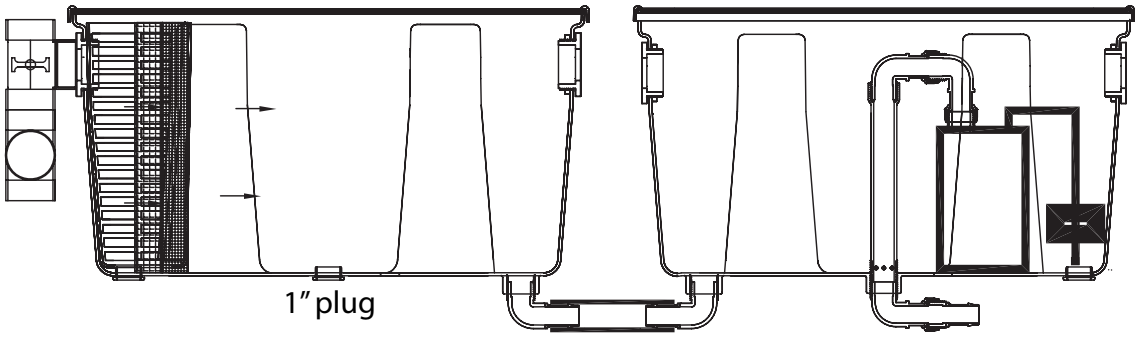
IMPORTANT DO'S AND DON'TS

At each filter cleaning time make sure to check that the bleed holes are clear of debris and the buffer tank is able to drain out into the garden when the pump is not operating



Buffer tank bleed holes

For large flows from industrial grade washing machines the GFlow buffer tank can be increased in size by connecting two or more GFlow buffer tanks in series



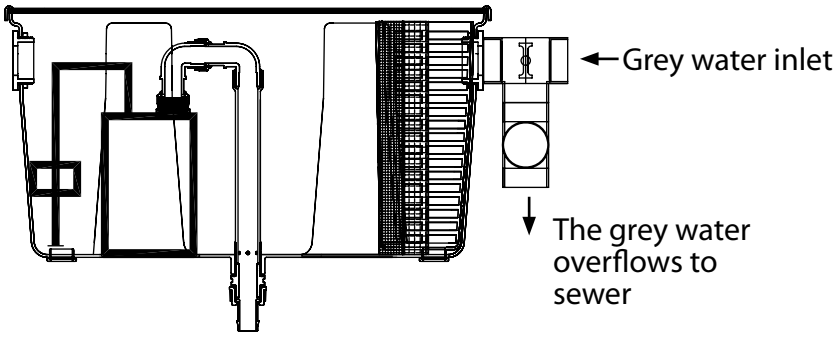
1″ plug

Join both buffer tanks with
1" or 1 1/4" LDPE

OPERATING MODES

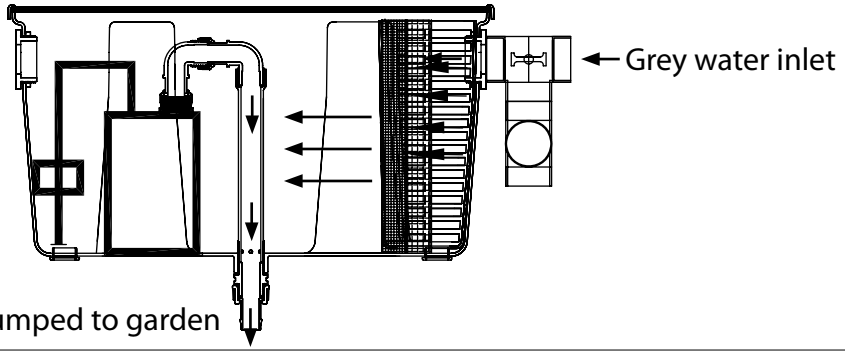
GFlow in shut off mode

The 3-way diversion valve is closed and the Grey Water is forced into the sewer overflow



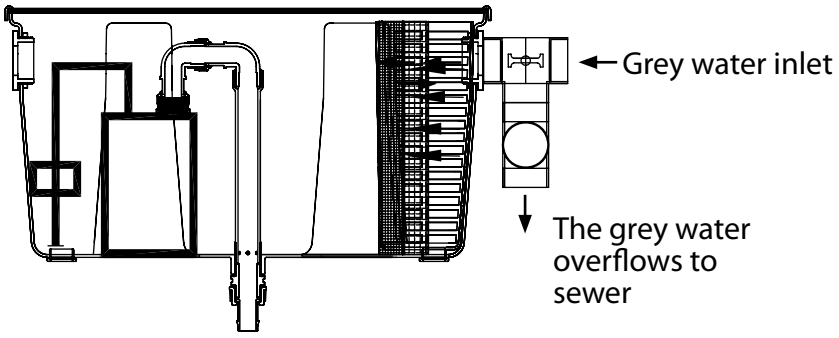
GFlow in operation with clean filters

The 3-way diversion valve is open and the Grey Water is forced into the filter basket

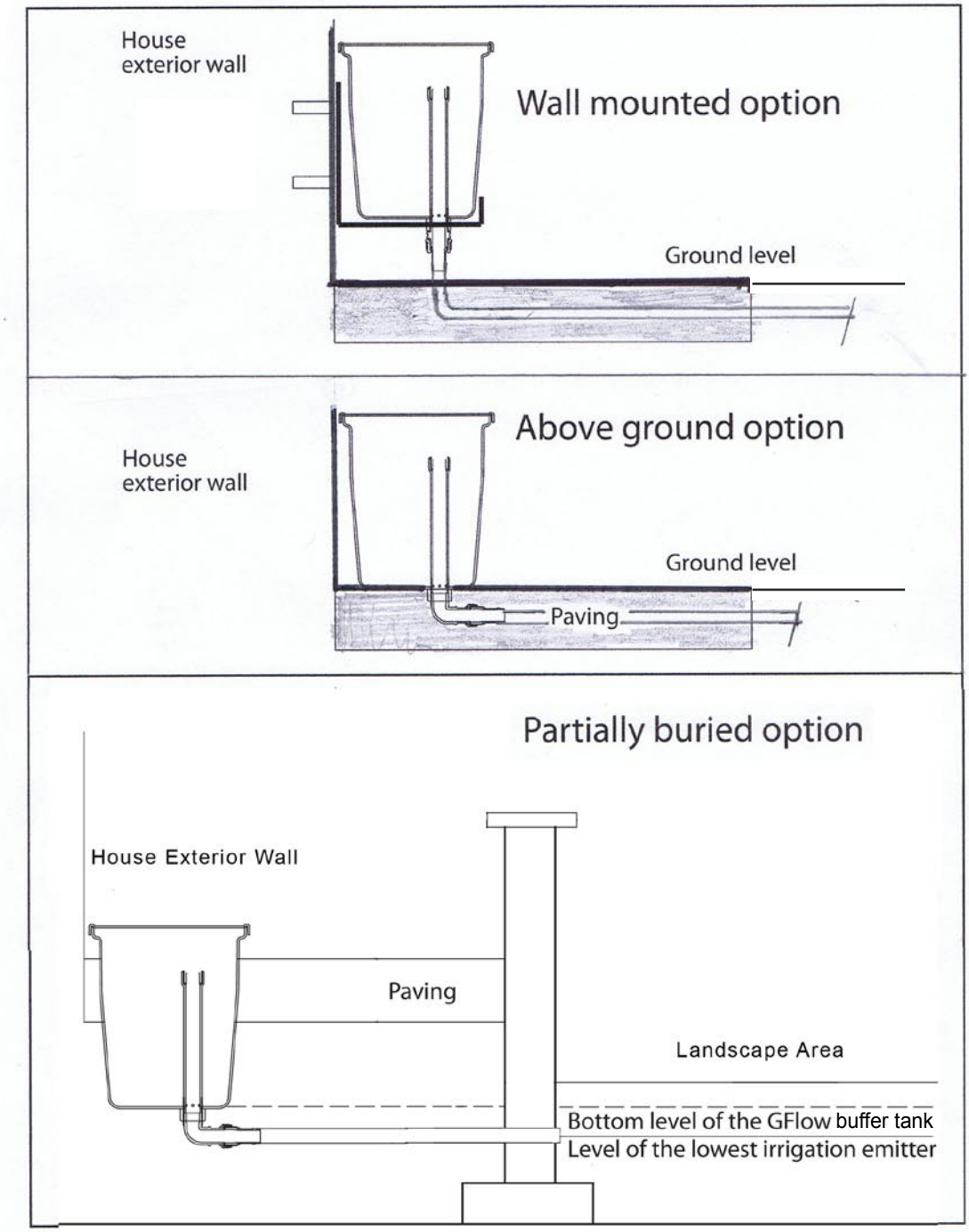


GFlow in operation with blocked filters

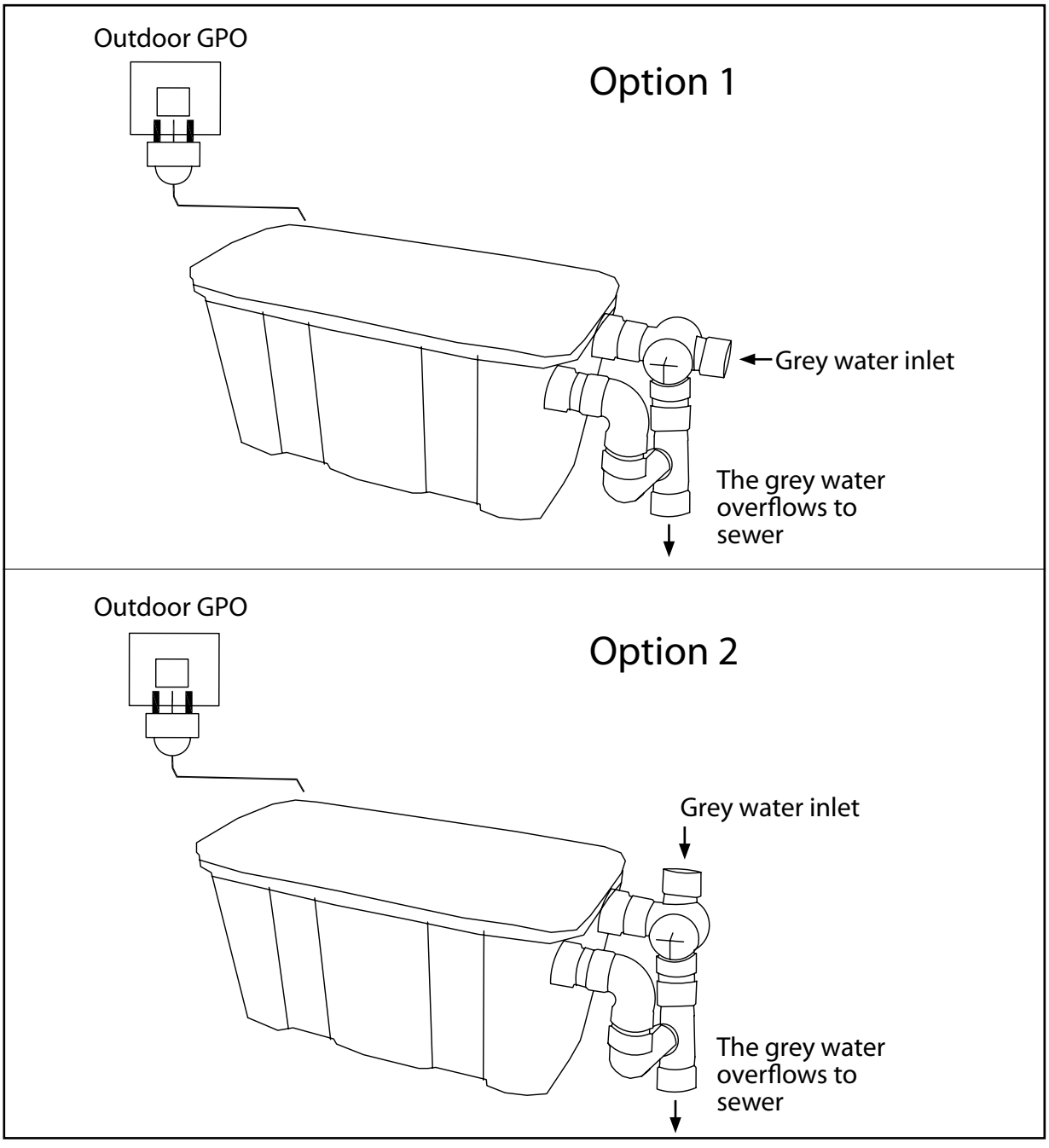
The 3-way diversion valve is open and the Grey Water is forced into the filter basket



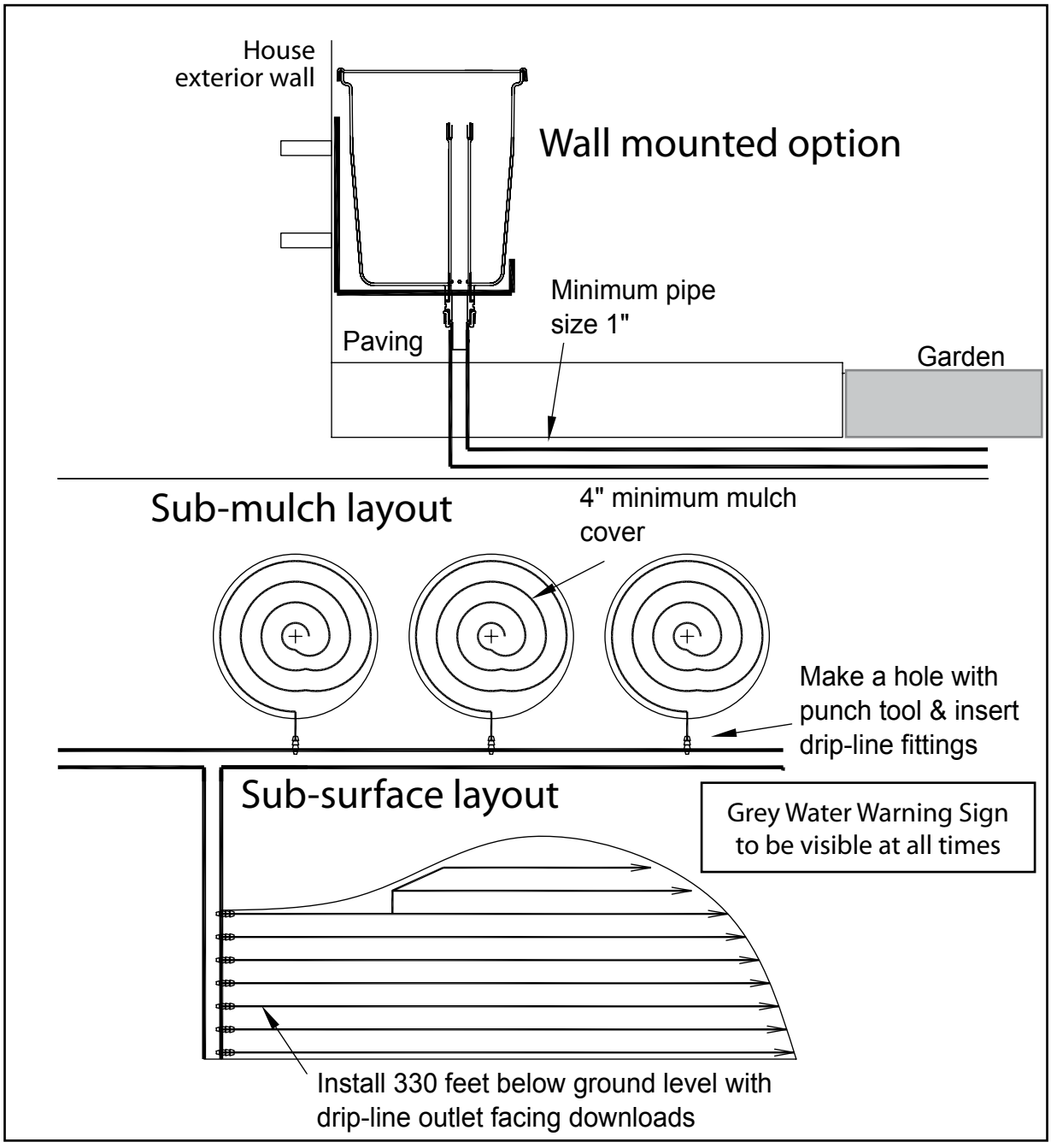
STEP ONE: GFLOW BUFFER TANK POSITIONING



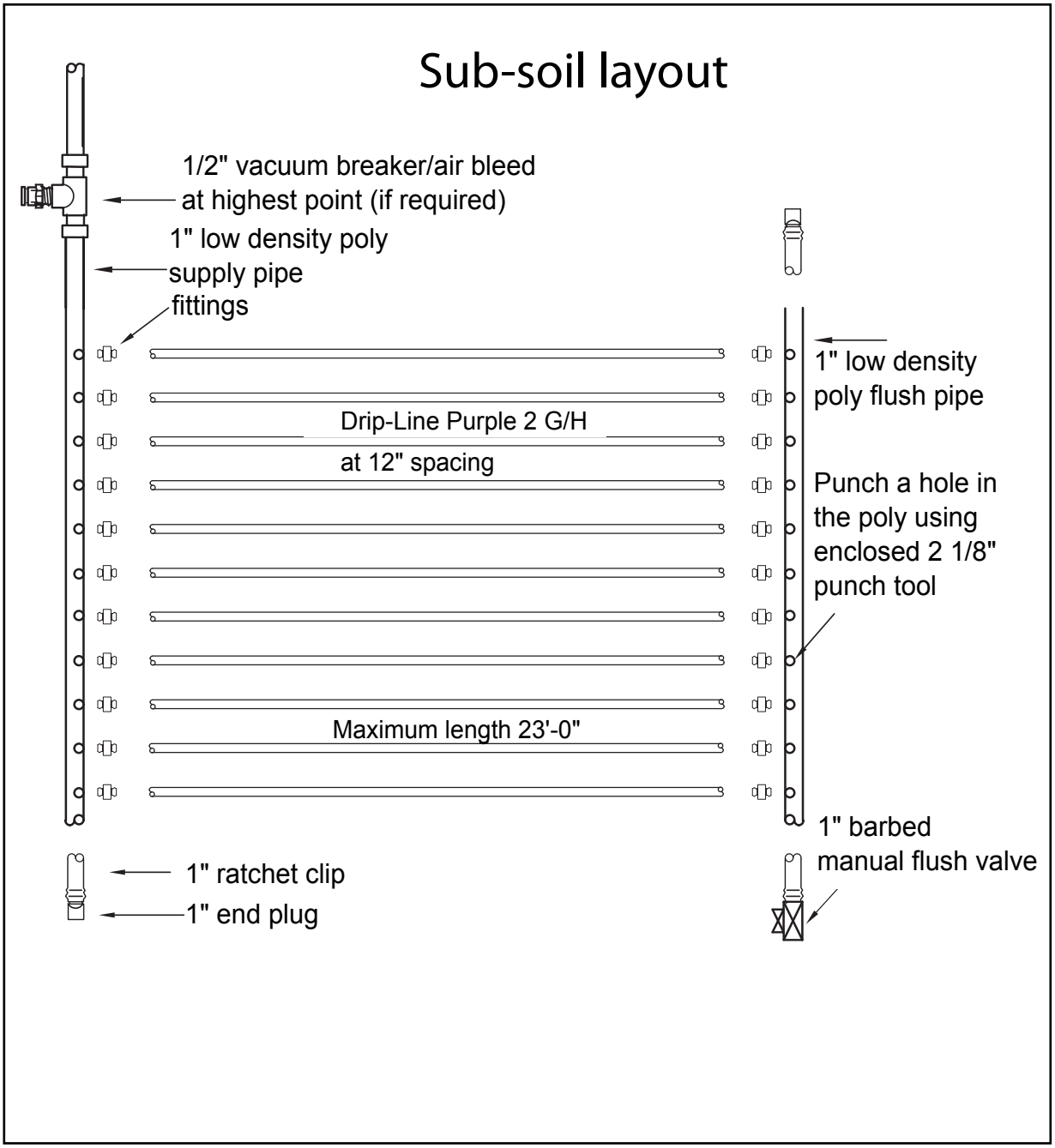
STEP TWO: PLUMBING AND POWER CONNECTION



STEP THREE: INSTALLATION OF IRRIGATION SYSTEM


House exterior wall
Wall mounted option
Minimum pipe size 1"
Paving
Garden
Sub-mulch layout
4" minimum mulch cover
Make a hole with punch tool & insert drip-line fittings
Sub-surface layout
Grey Water Warning Sign to be visible at all times
Install 330 feet below ground level with drip-line outlet facing downloads

STEP THREE: INSTALLATION OF IRRIGATION SYSTEM



RECOMMENDED MAINTENANCE

To retain the original reliability and performance of the GFlow System the following maintenance procedure should be followed. Please ensure that you wash your hands thoroughly after any contact with Grey Water or handling any part of the GFlow System.

The following maintenance steps should be carried every 3 months and not less than once every 6 months:

A) Open top cover of the GFlow buffer tank
B) Remove the filter basket with the primary sponge filters and wash thoroughly in a bucket with a garden hose or in any basin not connected to the dedicated Grey Water line.
C) Ensure that the bleed holes located at the base of the 1” riser are clear of debris and that the buffer tank is able to drain out into the garden when the pump is not operating.
D) Reinsert the filter basket in its original position; close the lid of the buffer tank and the GFlow system is ready to operate again.

The following maintenance steps should be carried out once a year:

A) Open top cover of the GFlow buffer tank.
B) Remove the filter basket with the primary sponge filters and wash thoroughly in a bucket with a garden hose or in any basin not connected to the dedicated Grey Water line.
C) Wash thoroughly the buffer tank with a garden hose and drain the buffer tank using any of the two cleaning outlets.
D) Disconnect the GFlow pump and connect the supplied going away backup quick connector
E) Flush the Grey Flow drip-line with fresh water for about five minutes.
F) Reinsert the Filter basket, reconnect the pump, close the lid of the GFlow buffer tank and the GFlow system is ready to operate again.
G) Top up mulch over the Grey Flow drip-line to a minimum depth of 4" (the Grey Flow Drip-line will need to be replaced every 5 to 8 years).

AWWS USA LIMITED CONSUMER WARRANTY

ONE YEAR LIMITED WARRANTY

AWWS USA, LLC ("AWWS") warrants this product against material defects in materials and workmanship for a period of **ONE YEAR** from the date of original retail purchase ("warranty period"). Warranty work will be done in accordance with the following terms and conditions. This warranty only benefits the original purchaser.

THIS WARRANTY COVERS ONLY DEFECTS IN MATERIAL AND WORKMANSHIP.
THIS WARRANTY DOES NOT COVER ANY OF THE FOLLOWING:

1. Expendable items that can wear out from normal use, including but not limited to, filters or similar perishable parts.
2. Damage to or failure of this System if it is not installed, operated, or maintained according to all instructions supplied with the System.
3. Damage to or failure of this System resulting from accident, abuse, misuse, or use for other than its intended purpose, Act of God.
4. Damage to or failure of parts or systems resulting incomplete or improper installation or from unauthorized modifications made to this System.
5. If you purchased the System from an unauthorized retailer or dealer.
6. Damage caused by power surges, electrical storm damage, incorrect power supply, or insect or vermin infestation.
7. Damage to or failure of parts if this System is serviced or repaired by anyone other than an Authorized Service Center.
8. This warranty extends only to you, the original purchaser. It is not transferable to anyone who subsequently purchased this product from you.
9. Use for more than a single family or use in a commercial establishment or for commercial non-household purposes.

10. Parts and Systems not supplied by AWWS USA are not covered by this warranty.

Any item which has been repaired or replaced under this warranty shall be covered for the remainder of the original warranty as extended by the number of days that the product has been out of your hands for repair.

YOUR RESPONSIBILITY

The above limited warranties are subject to the following conditions:

You must provide your original bill of sale, invoice or other proof of purchase of the System showing that you are the original purchaser, that the purchase was made within one year of the date of your claim and that you purchased it from an authorized dealer or retailer. No warranty work will be done without this information. Keep a copy of your receipt or invoice for your own records.

These limited warranties are effective only if this System is purchased and used in the United States.

Labor and service charges for warranty repair, installation, set up, and adjustment of customer controls are not covered by these limited warranties.

Should you encounter a defect in the System, go to **WWW.AWWS.US** to find the closest authorized service center. Contact the center and it will arrange for an inspection and corrective action, if needed and if covered by this warranty.

Should the center determine that the System is not covered by this warranty; any corrective work will be performed at your request and at your expense. If the center makes a second and/or subsequent visit and determines that there is no problem or that the System is not covered, the service call will be charged to you.

When making a warranty claim, please be prepared to provide a description of the System, your name, address, work day telephone number, a description of the problem, the date you purchased the System and the identify of the seller.

DISCLAIMER OF IMPLIED WARRANTIES; LIMITATION OF REMEDIES

1. ALL IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO ONE YEAR FROM THE DATE YOU PURCHASED THE PRODUCT.
2. NEITHER AWWS NOR ITS AFFILIATES ARE RESPONSIBLE OR LIABLE FOR ANY LOSS, INCONVENIENCE OR DAMAGE, WHETHER SPECIAL, EXEMPLARY, DIRECT, INCIDENTAL, CONSEQUENTIAL OR OTHERWISE, AND WHETHER KNOWN OR SHOULD HAVE BEEN KNOWN TO AWWS, INCLUDING DAMAGE TO OR REPLACEMENT OF OTHER EQUIPMENT AND PROPERTY AND PERSONAL INJURY RESULTING FROM ANY BREACH OF WARRANTY, THE INABILITY TO USE THE PRODUCT OR UNDER ANY LEGAL THEORY IN CONTRACT OR TORT. THESE WARRANTIES AND REMEDIES ARE THE SOLE AND EXCLUSIVE WARRANTIES AND REMEDIES GIVEN BY AWWS IN CONNECTION WITH THE SALE AND USE OF THE PRODUCT. NO OTHER WARRANTIES, ORAL OR WRITTEN, EXPRESS OR IMPLIED ARE GIVEN.
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4. **Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, or do not allow a limitation on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. You are advised to contact applicable state laws for a full determination of your rights. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.**
5. No AWWS dealer, agent or employee is authorized to make any modification, extension, change or amendment to this warranty.

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Advanced Waste Water System

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